## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

DEMODULATION, INC.

Civil Action No. 11-296 (WJM)(MF)

Plaintiff,

Hon. William J. Martini

v.

: DECLARATION OF JAMES O'KEEFE, JR.

CORNING INCORPORATED, et. al.,

Defendants.

I, James, O'Keefe, Jr., upon my oath, here by certify and declare as follows:

- 1. I am and have at all relevant times been the CEO of Demodulation, Inc., the Plaintiff in this matter.
- 2. Demodulation entered discussions with an Israeli company, Advanced Metals Technologies, Ltd. ("AMT") to explore a joint venture or similar arrangement to exploit AMT's patent concerning a glass coated amorphous metal wire. Attached hereto as **Exhibit A** is a copy of Demodulation's

- February 2002 Business Plan which was built on Demodulation's agreement at the time with AMT.<sup>1</sup>
- 3. Shortly after this business plan was drafted, it became apparent that AMT's chief scientist, Dr. Manov, did not possess the basic knowledge required to produce the technology Demodulation was pursuing. I learned this at a presentation AMT to professors and others from Alfred University sometime in March or April of 2002. During this presentation, Dr. Manov identified Dr. Horia Chiriac as the "father" of the technology. For this and other reasons, I terminated any relationship between Demod and AMT in either late April or early May 2002. See Exhibit B.
- 4. Based on its due diligence, Demodulation determined to license from Chiriac the exclusive rights to his patent for a glass coated amorphous metal wire called microwire. See Exhibit C. The microwire is an amorphous metal encased in glass with the approximate diameter equal to the width of a human hair. Since the glass coating, a form of ceramic, is integral to the properties of the microwire, Demodulation sought to partner with Alfred based on the university's world class reputation in glass and ceramics. Modifications to the glass coating change the properties of the microwire.

<sup>&</sup>lt;sup>1</sup> AMT and Advanced Coding Systems, Inc., ("ACS") are related corporations. I am aware of this from personal experience as is evidence from Exhibit B, which indicates that I knew at the time that AMT and ACS were subsidiaries of Elron.

For example, a porous glass coating enables the performance of polymerase chain reaction on the microwire. Demodulation later obtained United States Patent 7,368,166 for this invention. Alfred and Demodulation entered into a contract in 2002 to exploit Demodulation's license to the patent licensed from Chiriac and to seek funding for Demodulation's efforts.

- 5. Someone from Alfred, either Mike Hyde or Dave Szerbacki, suggested that Corning should be brought into the venture due to its financial and political prowess. A meeting was arranged and conducted with Pro Bardhan of Corning, with myself and other Demodulation employees. One or more Alfred representatives may have been present. At this meeting, we discussed and agreed that Demodulation and Corning should enter into a Confidentiality Agreement. None of Demodulation's confidential information was shared with Corning at this meeting or at any time before our confidentiality agreement was executed.
- 6. Demodulation and Corning entered into a confidentiality agreement on May 23, 2002 which was re-affirmed and amended on July 15, 2004. A copy of this agreement is attached to Ms. Walsh's Declaration as Exhibit B. The copy of this agreement I received at or about the time it was fully executed did not include the apparent stamp and handwritten information in the upper right hand corner of the last page as appears in the copy attached to Ms.

Walsh's declaration. Aside from the confidentiality obligation imposed on Corning by this agreement, Corning also agreed that it would not "use the Confidential Information other than for purposes of its business with Demodulation." Demodulation revealed certain confidential information to Corning pursuant to this Agreement including a copy of the 2002 business plan attached hereto as **Exhibit A**. This document was provided to Corning after the confidentiality agreement was with Corning was executed. I provided the document to Pro Bardhan of Corning with the explanation that Demodulation had the same basic plan in place, but had determined to obtain a license to produce and use microwire from Chiriac rather than obtaining wire from AMT. I also explained that we were in the process of updating the business plan to accommodate this change.

7. On July 15, 2004, the same date as the amendment to the confidentiality agreement with Corning, Demodulation hosted a meeting at the CCIC with defense contractors, Corning representatives, Chiriac, New York state government officials, the United States Navy, Science Applications International Corportion and others. The purpose of the meeting was to provide a technical demonstration and to essentially pitch Demodulation's business plan and its technology. Since confidential and proprietary information was to be shared, Demodulation obtained the amendment to the

confidentiality agreement with Corning before the meeting. The amendment broadened the scope of the agreement to include new applications, signals processing and composition of wire among other things.

- 8. Mr. Robert Ecklin came to this meeting though he was not invited by Demodulation. I did not know who he was at the time though at the meeting I learned he was an executive with Corning. I had never seen him at the CCIC facility. At the meeting, he questioned in front of the entire group whether Demodulation had the ability to develop and manufacture a marketable product. Mr. Ecklin's comments were also directed towards me personally, with Ecklin questioning my veracity, reliability and trustworthiness.
- 9. After the meeting, Mr. Ecklin pulled me aside and called me a "fucking asshole" and told me he wanted to see him at Corning's offices to discuss the matter further. I obliged a few weeks later. At the follow-up meeting, I gave Mr. Ecklin a copy of the business plan attached hereto as **Exhibit D**. He briefly reviewed it, explained that he did not know anything about Demodulation before the previous meeting, and assured me that neither he nor Corning would not stand in the way or interfere with Demodulation's efforts. He also assured me that Corning had no interest in developing or using microwire technology.

- 10. Though Mr. Ecklin obviously knew Demodulation was a company housed in the ATRI business incubator, even after I gave him this business plan he did not disclose to me that he was then the President of ATRI. Since I had never seen him at the CCIC or had ever even heard his name mentioned there, I had no idea at the time that he was the President of ATRI.
- 11. Over the next several months, Demodulation remained at the CCIC while continuing its efforts to obtain related patents and build interest in the business. In late December 2004 or very early in January 2005, I had the conversation with Dr. King described in my declaration dated March 30, 2012 which was previously filed with the court. The Corning employee referenced therein told Dr. King who told me that Dr. Borelli of Corning was working on glass coated wires with a foreign company. Dr. King advised me that the Corning employee did not know the name of the foreign company involved, what Dr. Borelli was doing with the wires, whether the wires were comprised of amorphous metal alloy or any other specific information. The Corning employee told Dr. King he had not actually worked on microwire at all, with or without Dr. Borelli. After hearing this information, I did not know whether the information provided by the Corning employee meant Dr. Borelli was working with Demodulation's

microwire or another company's. Based on this sketchy information, I wrote the letter dated January 5, 2005 as a means of ferreting out information that would allow me to determine what Chatlani was actually talking about and to determine if a legal issue existed that required attention. Based on the assurances provided from Mr. Ecklin at the follow-up meeting described above, I chose to write to him on January 9, 2005. I wrote to Ecklin because Ecklin looked me in the eye at the follow up meeting and assured me that Corning had no interest in the technology and would do what it could to help.

- 12. Vince Hatton's January 19, 2005 letter claims he investigated the issues raised by my letter and that he spoke to "relevant personnel" as part of his investigation. As I believe any reasonable person would have done, I understood this to mean that Hatton had discussed the matter with the Corning personnel mentioned in my letter: Mr. Ecklin, Dr. Mark Taylor, Dr. Charles Craig and Dr. Nick Borelli.
- 13. My reference to the "disclosure of information related to Demodulation" referred to in my January 9, 2005 letter was a reference to Mr. Ecklin's statements at the July 15, 2004 meeting. It was definitely not a reference to Corning's disclosure of confidential information to any third parties as I was not aware of any such disclosure at that point. I sent the

letter to Ecklin because it was referring to his statements at the meeting and because of the assurances he gave me at the follow up meeting with him at Corning's offices.

- The second factual allegation in my January 9, 2005 letter was 14. that Corning was engaged in "ongoing development efforts related to glasscoated metal wires involving foreign entities. Dr. Nick Borelli is managing these exploratory research and development efforts." Again, this statement was a reference to the information from Shyam Chatlani, who could not identify the foreign entity with whom Corning was allegedly working. I certainly did not know at the time that Corning was working with AMT/ACS. The first time I learned that Corning had even conducted meetings with AMT/ACS was in the summer of 2010 when Mr. Wilner provided me with the information recited in his certification previously filed in this matter. At that point, I believed Corning would have no reason to meet with AMT/ACS except to discuss confidential applications and other information I had provided to Corning.
- 15. After I received Mr. Hatton's letters in response to mine, I accepted Mr. Hatton's representation that there had been no breaches or other wrongdoing by Corning. I had no way of knowing or discovering

what Dr. Borelli was actually doing. The only thing I could have done was to address the matter to Corning, which I did.

- 16. After I received Hatton's letters, I believed that what Chatlani had heard was probably a reference to work or research Corning had done with the samples and information Demodulation had given to Corning. I believed it indicated that Corning was interested in microwire and was assessing it in house. I had fully hoped at that time that after Corning had a chance to complete whatever evaluation it was performing through Dr. Borelli, it would approach me with a proposal to work together.
- 17. I understand that certain information provided in discovery and marked "Attorneys' Eyes Only" up to this point indicates that Corning was working to some degree with foreign companies on at least one microwire application that required the remote sensing of the wire. My attorneys have advised that I am not yet able to review that document or any others marked "Attorneys' Eyes Only." I have not seen or been advised of the specific contents of any such documents. If Corning was working on this application at the time I received Mr. Hatton's letters, I would consider Mr. Hatton's letter to be a misrepresentation because Ecklin and Hatton assured me that there had been no violation of the non-disclosure agreement and that Corning had no interest in developing or using microwire.

- 18. I certainly was not aware of any damage caused or even potentially caused to Demodulation by Corning arising from any violation of the non-disclosure agreement between our companies or any of the other issues raised in my January 9, 2005 letter. Many viable opportunities seemed to still be on the table including the beginning of a relationship that ended up with a development contract with the United States Department of Energy. Also at approximately that time Demodulation obtained a \$500,000 investment from an individual investor for approximately 5% of the company. None of the persons or entities present at the July 15, 2004 meeting indicated that Mr. Ecklin's statements at that meeting influenced them at all.
- 19. Had I known in January of 2005 that Corning with working with another company or companies to develop an RFID application for microwire I can unequivocally state that I would have taken legal action because the RFID applications for microwire were revealed to Corning by me and Demodulation. See Exhibit A at page 50 through 63. An RFID application refers to Radio Frequency Identification which means that radio waves are used to interrogate a sensor which produces a signal in response to the radio waves. Most RFID systems require that a power source be attached to the sensor. One of the chief advantages to a microwire-based

RFID system is that the radio waves themselves power the signal generation from the wire without the need for an additional power source. For this reason, a microwire based RFID system is sometime referred to a passive RFID system. What this effectively means is that a strand of microwire can be placed covertly where a traditional RFID tag cannot. It also means that a microwire based RFID system can be placed in very tight spaces where a tag which requires a battery cannot.

20. If I had learned in January 2005 that Corning was working with AMT/ACS or a corporation affiliated with them to develop an RFID application for microwire I would have taken legal action and I would have been extremely upset. I knew at the time that Mr. Ecklin told me that Corning had no interest in microwire technology though I did not know he was affiliated with ATRI at the time. Most importantly, one of the reasons that I terminated Demodulation's agreement with AMT/ACS was that they did not understand how to produce wire that could be detected by the radio frequency methods nor did they understand radio frequency detection systems in general. Demodulation did understand this method and had revealed it to Corning. So if Corning and AMT/ACS were working on an RFID method with microwire, it had to be as a result of information provided to Corning by Demodulation and would have been a violation of Corning's obligation to not "use the Confidential Information other than for purposes of its business with Demodulation."

- 21. If I had learned in January of 2005, that Dr. Mark Taylor of Corning was working with AMT/ACS or a corporation affiliated with them to develop an RFID application for microwire, I would have taken legal action and I probably would have had a stroke. I did not know exactly what Dr. Taylor did for Corning, but I knew that he had negotiated the confidentiality agreement with me and was privy to the confidential information Demodulation had revealed to Corning. It was for this reason that I specifically referenced Dr. Taylor in my January 9, 2005 letter. Upon my receipt of Mr. Hatton's letter dated January 19, 2005, I understood it to mean that he had talked with Dr. Taylor and Dr. Taylor indicated he was not aware of any work Corning was performing with any foreign companies on microwire.
- 22. The last line of my January 24, 2005 letter was an expression of my personal feelings, as I made clear in the letter. I felt hurt by Corning's refusal to support or invest in Demodulation because I fully believed then as I do now that microwire technology compliments and could improve Corning's technology in several areas. It was certainly not an expression

that Demodulation had suffered any losses or injury at that time as the result

of any actions by Corning.

23. In my January 24<sup>th</sup> letter, I referred to certain CEO's who had

told me they heard that Corning had made disparaging remarks that was

limiting our ability to raise capital. This was once again a reference to Mr.

Ecklin's comments, which were actually mostly pointed questions, and

which did not convey any false information about Demodulation. I was

actually referring to only one CEO, Erland Kailbourne, who was actually a

former CEO. He had told me that without Corning's support, it would

difficult to obtain grants or investment because Corning largely controlled

New York state's economic develop projects in the geographic region

through their political connections. I was not aware at that time of any

applications for funding or investment that had been denied or declined due

to Corning's statements or influence.

James O'Keefe, Jr.

James O'Keep Jr.

Dated: September 23, 2013